2: Gamble S-5 (1926-1933)1954 AF12 North China AF12

especially strong resistance when the Japanese invaded Ting Hsien in 1937.

We fully realize that much of our material has been secured from people who do not usually think in mathematical and statistical terms, to many of whom "several tens" is a reasonable approximation, and who are generally suspicious of anyone asking detailed and intimate questions. At the same time the very happy relationships between the staff of the Mass Education Movement and the Ting Hsien people made it possible for us to overcome much of this suspicion and to secure the best possible approximation to complete and accurate figures. Comparison of the figures secured from a variety of sources has shown an agreement which indicates that they give a reasonably true picture of the local conditions.

There was fighting, requisitioning of supplies, and looting in the Ting Hsien area in 1928 when the Nationalist forces came in from the south to capture Peking and unify the country. Troop movements through Ting Hsien in 1931 made it necessary hurriedly to pile our records in a small room and brick up the door. Fortunately the actual fighting was to the north and the disturbance was quickly over. Our records were not touched. Aside from those two short periods, the time of our study was relatively quiet and stable. The worldwide depression of the early 1930s affected prices and the economic life of Ting Hsien, but most of our field work had been finished by that time. As our study was made during a time when life in Ting Hsien, in spite of the two periods of military activity, was relatively normal and as the study was made under unusually favorable auspices, we feel that our findings can be taken as reasonably typical of life in Ting Hsien and as a good sample of rural life in North China.

Some questions must remain unanswered because the material was not available to us, others because the author of this report was not able to spend as much time in the field as had originally been planned and because the necessary delay in tabulating and analyzing the material, plus the political developments in North China, made it impossible to go back to the original records, to rearrange tables, and to get answers to questions that could not be cleared by correspondence.

All dollar figures are Chinese silver dollars. Cents are Chinese dollar decimals unless otherwise noted. From 1926 through 1933 the value of

2: Gamble S-5 (1926-1933) 1954 AF 12 North China Af 1:

162 321 There were 2,169 families in the city, and 67,865 in the 453 "villages" and "towns".

The number of families in the individual villages ranged from six to 1,200. Twenty per cent of the villages had less than 50 families, 46 per cent had less than 100 families, and 75 per cent had less than 200 families. Only seven, 1.5 per cent, had as many as 500 families. The average was 150 families per village, or 154 families if the hsien city is included.

162 634 The following figures show how the villages and families were divided in the six administrative districts of the hsien.

District	*Villages*	*Families*	*Average No. of Families per Village*	*Average No. of Mu per Family*
1	71	6,555	92	23.8
2	63	8,062	128	22.8
3	83	15,939	192	21.5
4	73	16,010	220	19.7
5	73	7,864	108	19.1
6	90	13,435	149	19.8
City	—	2,169	—	6.2
	453	70,034	150	20.4

It will be noted that in the different districts the number of villages varied from 63 to 90, the number of families from 6,555 to 16,010, and the average number of families per village from 92 to 220. We have not been able to find any reason for the wide variation in the averages. There were four market towns in the 4th District, the one with the largest average, but while there were two market towns in both the 3rd and the 5th District the average in the 5th District was 50 per cent more than in the 3rd. There was no market town in the 1st District as the city was its market center. If the city and 1st District are added together the average was 121 families per "village".

161 634 In contrast to the wide variation in the average number of families per village, there was only a small difference in the average amount of crop area per family in the six districts. It ranged from 19.1 mu in the 5th District to 23.8 mu in the 1st District. The average for the entire hsien, including the city and its three suburbs, was 20.2 mu per family.

162 124 659 A complete study of any part of the Chinese population is a difficult

2: Gamble S-5 (1926-1933)1954 AF 12 North China A[illegible]

task. The people, especially those living in the country, are fearful lest the figures be used as a basis for taxation or for the recruiting of soldiers and laborers for the army, or laborers for public works projects such as dyke and road building. Reports given to Government enumerators are often very incomplete and sometimes attempts have been made to "persuade" the census takers, counting not individuals but families, to send in figures much below the actual number.

Our investigators naturally met some of this same suspicion when they were counting the families and still greater difficulties when securing detailed reports from individual families. Boys were sometimes omitted lest information about them make it possible to cast their horoscope and exert an evil influence over them; young men because of possible military service. Young girls would be left out because some families feel they do not amount to much; unmarried women because it was felt that the fact that they were unmarried reflected on the family. These difficulties were overcome, at least partially, by the fact that the study was made by representatives of the Mass Education Movement, and the matter had been discussed beforehand with the village heads in order to clear up any misunderstandings and obtain their active help and cooperation. In many villages they accompanied the investigators from house to house, and their knowledge of the individual families often made it possible for them to remind the family heads of some members that they had "overlooked". In one town we counted 200 more families than the official figure.

A "family" in this study included the present members of the family and the absent relatives who shared in the family budget. A person living alone was counted as a one-person "family." Employees were not included as they were listed with their own families.

Our population figures were secured by an extensive study of the number of families living in the hsien and by intensive studies of five different groups of families that together included 8,464 families and 49,609 individuals. Two of the studies were definite population studies. In the others securing the figures on the size of the families was incidental to the collection of other material.

The groups of families, their location, the number of families and persons included, the date of the study, the size of the average family, and the masculinity rate (males per 100 females) were:

2 Gamble S-5 (1926-1933) 1954 AF 12 North China AF 12

Study	Families	Persons	Year	Location	See Chapter	Average Size of Family	Masculinity Rate
1	400	2,536	1927	Experimental District	III	6.3	108
2	34	205	1928	Experimental District	V	6.0	107
3	515	3,571	1929	Experimental District	II	6.9	106
4	5,255	30,642	1930	1st Dist., 80 per cent of families	II	5.8	106
5	2,260	12,655	1932	6th Dist., 6 villages	IV	5.6	112

The averages for the first three groups cannot be considered typical community figures as the groups were not random samples. They all included more than an average number of middle class and well-to-do families. The 34 and the 515 family studies included no one-person "families".

In our first studies our field workers found it easier to get the wealthier families to cooperate. We had no figures to indicate what was the average distribution of the families in different property and income groups. We wanted to have enough of the middle class and wealthier families so that the group figures would show what, if any, difference there was in the average size of the families in the different income groups.

That the size of the family was definitely related to the size of the family income was one of the first facts shown by our studies. Whether the family income was estimated in dollars or the income groups were divided according to the size of the family farm, it was clearly evident that, on the average, the size of the family increased as the family income increased. This did not necessarily mean an increase in the number of children in the family but in the number in the group living together. There were relatives who were willing to make use of any increased income. In some cases the family membership and the family income were both large because the family had not been "divided"; brothers and their families were still living together.

In our first study, of 400 farm families, the size of the average family increased from 3.8 persons for families with not more than 10 mu of land to 13.5 persons for those with more than 100 mu. In our third study the families with less than 10 mu of land averaged 4.7 persons; those with 100 mu or more averaged 12.9 persons. In our fifth study the average was 4.1 persons for the families with no land and 13.2 for those with 100 mu or more.

2: Gamble S-5 (1926-1933)1954 AF12 North China AF12

CHAPTER III

Four Hundred Farm Families

FOUR HUNDRED farm families living in the 62 villages of the Experimental District were studied in 1927 in order to secure figures that would give a picture of their economic life and activities. Two hundred and two families, 50.5 per cent, lived in Chai Ch'eng, the village where the Mass Education Movement had its headquarters. The other villages had from one to seven families in the study. The 202 Chai Ch'eng families were 55 per cent of the families living in that village.

The 400 families were a 4 per cent sample of the farming families in the Experimental District. The total number of families in the District was 10,445, but generally some 3.5 per cent of the families were not farm operators. They were landlords, business men, artisans, and hired laborers.

Contact with the families studied was generally made through the teachers of the Mass Education schools. Answers to a questionnaire covering farm size, ownership, operation, production, value of farm lands, houses, implements, number of farm animals, details of farm income and expense, age and sex of the members of the family, and amount of family income and expense were secured from the head of the family. The figures given here are the tabulations of the answers to that questionnaire. Being based on reports and estimates, they cannot have complete accuracy, but their consistency, when the families are grouped according to the size of their farm and the type of farm ownership, seems to show that they give reasonably accurate pictures of the farm families in the Experimental District and very probably for all of Ting Hsien.

While we attempted to make the group of 400 families as nearly typical as possible, our area of choice was necessarily affected by the families' willingness to cooperate in, to them, a new and unusual study and their readiness to answer many intimate questions. The group therefore probably had a higher than average intellectual level. We

2: Gamble S-5 (1926-1933)1954 . AF12 North China AF12

CHAPTER IV

Home Industry Families

IN ORDER to round out our study of village home industry (see Chapter XV) and secure more complete and detailed figures than was possible in our hsien wide survey, a family by family study was made, in 1932, of six neighboring villages in the 6th District north of the T'ang River. Their location is shown on the hsien map on page 5.[1] The villages varied in size from 120 to 1,100 families. The total in the six villages was 2,260. Seventeen hundred and forty families, 77 per cent, reported some home industry. In the individual villages the proportion varied from 70 to 96 per cent.

The number of persons in the 2,260 families was 12,655, an average of 5.6 persons per family. In the individual villages the average number of persons per family varied from 4.5 to 6.9. In the 5,255 families in the 1st District the average family had 5.8 persons.

The six villages had a total of 30,521 mu of farm land, an average of 13.5 mu (2.25 acres) per family and 2.4 mu (0.4 acres) per person.[1] This was only two-thirds of the hsien average. In the individual villages the average amount of land per person ranged from 1.1 to 5.3 mu. The largest village had the smallest amount of land per family, 9.5 mu. The smallest village had the largest average per family, 27.5 mu.

Besides having the smallest amount of land per family, the largest village also had the smallest proportion of families engaged in home industry, 70 per cent. The home industry families, however, compensated, at least in part, for their smaller farm income by more industrial work. The average time they worked during the year was over 50 per cent more than the average of the next most active village and more than twice the average of the village with the least industrial activity.

It had been our original intention to study all of the home industry

1. It was reported (1950) that the Central People's Government land program allowed a family to hold 2.5 mu per person.

1 [See Cat. 116, p. 5 -- Analyst]

4: Burgess E-4, 5 (1926-1927) 1928 AF12 North China AF12

Many of the guilds hold their annual meetings in this temple. Mr. Jun Shan Chiao,[1] the priest, was familiar with the proceedings of the guilds and was held responsible for many of the preparations for their meetings and ceremonies. In March, 1926, in company with Mr. Chang, the writer called on Mr. Chiao at the Temple and requested his cooperation in this study. The general plan was described to Mr. Chiao and he readily consented to cooperate with us. The fact that the writer had been his nephew's teacher and that his nephew fully understood the object of the investigation evidently quite satisfied Mr. Chiao and he showed neither curiosity as to why we were studying the guilds nor suspicion regarding the enterprise. The priest knew of the writer's personal interest in his nephew's future education in America, and the very pleasant chat regarding the guilds was concluded with a discussion of ways and means. Mr. Chiao then showed us around the old Temple, taking us through a large theatre with a gallery at the rear and on two sides, and having a stone slab floor. We inspected the large stage where the plays are given to the "Sacred Masters" or the supposed founders of the guilds. Certain locked rooms where records of the guilds are kept were pointed out.

(5) Mr. Chang secured from his uncle introductions, either by telephone or by letter, to prominent men and officials of the guilds to be studied. He selected organizations whose officers were known personally to his uncle. He called on these men, taking the questionnaire with him and making notes of replies. In many cases several interviews were necessary. With insight into difficulties that might arise through suspicion on the part of members of the guilds as to the object of his study, Mr. Chang concealed the fact that he was securing this information for a Westerner.

[1] A full description of Mr. Chiao's characteristics is given on pp. 56, 57.

4: Burgess E-4, 5 (1926-1927) 1928 AF12 North China AF12

124 The following is a quotation from a letter of Mr. Chang's to the writer, dated Oct. 29, 1927:

> We chose these particular guilds because those who are in charge of them are either our relatives, friends, or neighbors, or our relatives' relatives, friends' friends, or neighbors' neighbors. We did not try the guilds of which we did not know the heads and secretaries personally. Besides, we chose them because we were perfectly sure they were the right kind of men to give the information needed, as some of the guild heads are very ignorant and they cannot answer questions to the point. Before we went to see the guild heads and representatives, my uncle and other friends had already smoothed the way for us. They had explained to them why we wanted this kind of material. We did not tell them that we were collecting this material for you, but said it was for me. We told them that I was going to America to study and I would require such material for my work there. As they knew that I had studied in Yenching, a foreign institution, and would go to America this fall to study, they were very willing to answer my questions and showed no suspicions at all. They did not try to give wrong information, as they would have if they had known I was collecting the material for a foreigner. Mr. Wang, one of the other two investigators, was introduced to our friends as my friend collecting material for me, and we told him not to mention you. They praised me highly and told me to ask them any thing they knew about the guilds, that they would be willing to help. In case they did not know themselves they would find out for me. They have confidence in my uncle or the ones that did the introducing, so they showed a very friendly attitude and did not ask why we were collecting this material. The type of questions they put to me were: "When will you go in America?" "Who will go with you?" "How far is it from China to America?" "How will you go, by train or by boat?" "How much will it cost you there?" "How many years will you stay in America?"
>
> Since the questionnaires were filled during the interview by

4: Burgess E-4,5 (1926-1927) 1928 AF12 North China

ourselves, we had favorable conditions. It would have been very hard for us not to use the questionnaires because we could not remember all the questions and we had to put everything down on the sheets, otherwise we would forget some of them, especially the figures and dates. We could not finish the questionnaire at one interview, as it took some time and they would be tired to answer them all at one time. We had to go several times in order to get a complete record, and sometimes they had to ask others the questions they did not know themselves.

124.

We tried to have the questionnaires filled by the guild heads or secretaries, but they were not satisfactory and complete. Some misinterpreted the questions, and some answered very few as it would take too much of their time to write answers to every question. Moreover some did not know how to write so we had to fill them ourselves. Even in the case of the few that were filled by the guild authorities, we had to go again for further information.

This extract shows the favorable conditions under which information was procured and would tend *a priori* to show that it was accurate to this extent, that it represented the actual opinion of the guild officials who were without desire to deceive. Inasmuch as Mr. Chiao was personally known to these men and the information was believed to be for his nephew to help him in his further study in America, there was no object in falsifying the report. Also, since Mr. Chiao was himself familiar with guild procedure, these guildsmen, his personal friends, would hesitate to give his nephew false statements which might be seen by the uncle.

Mr. Chang, as a matter of fact, went over many of these reports with his uncle to check up the information and make sure that he had reported accurately the ideas of the guildsmen.

Mr. Chang afterwards secured the services of Mr. He Chen Wang,[1] a co-worker with him in the office of Mr.

[1] For a full description of Mr. Wang's qualifications, *cf.* p. 57.

4: Burgess E-4, 5 (1926-1927) 1928 · AF12 North China AF12

124 Gamble.[1] Mr. Chang did his investigating in spare time outside of office hours. He did not consult with Mr. Gamble regarding results. Mr. Chang introduced Mr. Wang to the heads of some of the guilds he studied. Mr. Franklin Lee, then chief investigator for Mr. Gamble, through the latter's kindness also made an independent investigation of four guilds. Mr. Chang makes the following statement:

> Mr. Gamble asked Mr. Lee to take Mr. Wang to the guilds to which we were introduced by my uncle in order to show Mr. Wang how to meet people and approach the problem. Mr. Lee showed Mr. Wang only two guilds and then they carried on their study independently. Lest Mr. Wang might not know how to handle the problem properly and successfully, I went with him to investigate five guilds.

A complete list of guilds studied, with the dates, names of investigators, and the names and positions of the men who gave the information is given on pages 65 and 66.

Mr. Chang's statement of the relationship of the various investigators to one another is given in the following quotation from a letter:

> Besides giving introductions, my uncle helped in checking up the questionnaires to see if we had the right information and sometimes he accompanied me to some of the guild heads that I myself do not know personally.
>
> I did not consult with Mr. Gamble regarding my work. While I was doing the first five you were in Peking, so it was not necessary to consult with him. He was in America while I was studying the other twenty guilds.
>
> The usual places where the workers and merchants meet for discussing things are either the tea houses or the restaurants. It is not convenient to meet in the homes or shops, they think, so I was advised by my uncle to meet them in some of the small

[1] For a full description of Mr. Gamble's characteristics, *cf.* pp. 57, 58.

4: Burgess E-4, 5 (1926-1927) 1928 AF12 North China AF12

restaurants, talking while eating, in order to make them feel more willing to help on the one hand and to make the time not seem too long on the other. 124.

Mr. Lee and Mr. Wang spent almost three months entirely on the guild study.

Mr. Lee writes on November 28, 1927, from Peking giving the following information regarding his method of procedure in obtaining the material regarding four guilds.

The approximate date of the investigation was the latter part of June and the early part of July, 1926. I obtained the information from the following persons:

(1) the Peking Association of the Pork Merchants—from a Mr. Liu, secretary of the organization, who gave the information quite frankly;
(2) the Peking Association of the Mutton Merchants—from a Mr. Wang, secretary of the Association, who was quite open;
(3) the Electricians Association from a Mr. Chang—an ordinary member, who was very frank in answering my questions;
(4) the Bankers Association—from a Mr. Yuan, connected with the Continental Bank, who was very responsive.

I obtained my introduction to Messrs. Liu, Wang and Chang through some friends. Mr. Yuan is a returned student, whom I know very well. I first wrote their answers in a notebook while conducting the interview, and filled out the questionnaire blank afterwards. Mr. Yuan filled out the blanks for me for the Bankers Association.

(6) Three guilds in Foochow were studied by Mr. Li Jen Fan, a former graduate student in sociology (1925-1926) at Yenching University.

In response to a request mailed to the Department of

4: Burgess E-4.5 (1926-1927) 1928 AF12 North China AF12

124 Sociology of Nanking University we received one fully filled-in questionnaire by mail. It is not known who supplied this information, but undoubtedly it came through the faculty or the students of the university there.

The foregoing shows how the principal material for this paper was collected.[1] Of the forty-seven Peking guilds studied by Chang, Wang and Lee, four were used merely for comparative purposes and are not included in the tables. They were rejected either because of insufficient data, or because there was a question as to whether even with the broad latitude of this rough definition these associations could be classified as guilds.

B. Description of the Investigators

1. Mr. Jun Shan Chiao, the priest, is a tall, virile-looking man, keen in conversation, quick at getting new ideas, a Chinese scholar, as indicated by his diction and his manner. The following extracts from Mr. Chang's letters give an interesting description of his uncle:

My uncle served in the ceremonies under the Manchu dynasties at the Temple of Heaven, Agriculture, Earth, Sun, Confucious. He ranked as the number two in the Sacred Music Bureau. He is still serving in the ceremonies in the Confucian Temple and the Temple of Kuan Yueh, two military sages. He is now fifty-one years old and has been living in two temples, Ching Chung Miao and Yao Wang Miao, where most of the Peking Guilds have been holding their annual meetings for about forty years. During all the time he has been dealing with the guild heads, and that is why he knows so much about them, especially the craft guilds. He arranges food, seats, plays and God's hall[2] for them. He is not a man of modern education but has

[1] The number of guilds studied by each investigator is given in Table III.

[2] By this is meant the hall for the worship of the guild founder.

4: Burgess E-4, 5 (1926-1927) 1928 AF12 North China AF12

a modern mind. He is a very wise and practical man. He held a very important position in the Sacred Music Bureau in the Manchu Dynasty. He is an expert in managing things. He is keen and quick. 124.

2. Mr. Hung Chun Chang was graduated in 1925 first in his class at Yenching University, the Union Christian college in Peking. He majored in sociology and did a great deal of work in economics. He is extremely quick and keen and has proved himself a very capable research man in the office of Mr. Gamble.[1]

3. Mr. Wang is described by Mr. Chang thus:

Mr. He Chen Wang, twenty-six years old, a Yenching graduate of 1925, preaching in General Feng's Army for one year, beginning to work in Mr. Gamble's office as his research assistant July, 1926, in connection with a home budget study in Peking.

4. Mr. Franklin C. H. Lee, who obtained his A.M. degree at Columbia University, has done very creditable work for Mr. Gamble. He has been appointed to the staff of the newly organized research department of the China Foundation.[2]

5. Mr. S. D. Gamble received his A.B. at Princeton and his A.M. in Economics at the University of California.

[1] He describes himself as follows: Mr. Hung Chun Chang, twenty-five years of age, a Yenching graduate of 1925. Specialized in sociology and social work while in college, having been called as a social research assistant to Mr. S. D. Gamble since graduation, having well in hand 110 years' material on the cost of living in Peking, planning to go to America this fall to study sociology, social work and social research.

[2] Mr. Chang describes him thus: Mr. Franklin C. H. Lee, M.A., a returned student from America, studied one thousand rickshaw coolies in Peking 1924-1925, and the history of building material prices in Peking last year under the supervision of Mr. Gamble; now working as a field secretary in the Social Research Department of China Foundation.

4: Burgess E-4.5 (1926-1927) 1928 AF12 North China AF12

124 During 1918 and 1919 he resided in Peking where he and the present writer cooperated in making studies which were incorporated in a volume entitled *Peking: A Social Survey*. This was the first social survey published of any Oriental city. Mr. Gamble helped in the guild study principally by criticism of the original questionnaire and by contributing the time of Mr. Wang and Mr. Lee.

In his original study of the city of Peking Mr. Gamble took special interest in the question of guilds. He employed a Mr. Chen, a graduate of the Wharton School of Commerce of Pennsylvania, to study the commercial life of Peking. Mr. Chen, under Mr. Gamble's direction, spent a year in research work largely devoted to the study of guilds.

Mr. Gamble returned to Peking in 1924 where he resided until September, 1927, engaging in research on economic questions.

C. The Checking of the Material

Comparison with the earlier study made by Mr. Gamble

Material collected by Mr. Gamble and his associates in the earlier survey mentioned above dealt with some of the guilds included in this study.[1] The present survey was made by different investigators eight years later and in greater detail. Mr. Gamble's earlier material, however, is a valuable check on the general aspects of guilds and on certain data on organization and functions. His first-hand impressions of a meeting of the Blind Guild are especially useful.

[1] Some of the guilds touched upon in *A Social Survey* were as follows:

The Tailors ..... p. 171	The Shoemakers ..... p. 176
The Blind ..... p. 171–4	The Barbers ..... p. 177
The Carpenters ..... p. 176	The Paperhangers ..... p. 179
	The Bankers ..... p. 179

4: Burgess E-4, 5 (1926-1927) 1928 AF12 North China AF12

tioned the term "gold" is added. The Chinese dollar is worth approximately one-half of the American gold dollar.

The approximate rate of exchange for 1926, the year in which most of the data were obtained, has been calculated on the basis of the average monthly exchange in Peking.

$1.00 = 345 coppers	1 tael = $1.39
1.00 = .72 taels	$1.00 American gold = $2.03
1.00 = $.49 American gold	

G. List of the Guilds Studied

Table IV lists the names of the 42 guilds studied. The guilds may be roughly classified as Handicraft 16, Commercial or Mercantile 18, Professional 8.

There are three handicraft guilds that not only make their respective goods but have stores where they sell them. They are the Awning Makers, the Cloisonné Designers, and the Silk Thread Makers. There are three commercial guilds which include not only keepers of stores but skilled artisans. They are the Clock Stores, the Shoe Stores, and the Hat Stores. Thirteen of these guilds are reported on by their respective heads; the others, by the guild secretary, a head worker (master journeyman), or some other officer. In a few cases the information comes from "a member" or "an old member."

H. The Age of Informants

In the case of twenty-six of the forty-two guilds the approximate age of the informant was given, the figure given being only a rough guess on the part of the investigators. The fact that all men interviewed were over forty, combined with the fact that in practically all guilds the guildsmen start young in the trade, craft, or profession, would seem to indicate that these twenty-six were men who had been sufficiently long in the guild to know whereof they spoke.

4: Burgess E-4, 5 (1926-1927) 1928 AF12 North China AF12

TABLE IV

NAME AND CLASSIFICATION OF THE FORTY-TWO PEKING GUILDS INVESTIGATED

(There are also included Name of Investigator, Date of Investigation, Name of Informant, Age of Informant, Position of Informant)

Name of Guild	Name of investigator	Date of investigation	Name of person who gave information	Approximate age of informant	Position of informant in guild
A. Handcraft					
Awning Makers*	Wang	Apr.–June '26	Sha	50	Manager
Carpenters	Chang	" " "	Chang	50	Head worker
Cloth Pasters	Chang & Wang	" " "	Jen	50	Head of G.
Cloisonné Designers	Chang	Dec. '26–Mch. '27	Wang		" " "
Confectionery Makers	Wang	Apr.–June '26	Yang	60	Old member
Dyers	Chang	Dec. '26–Mch. '27	Lee		Yearly secy.
Leather Box Makers*	Chang	" " " "	Huang		Descendant of G. founder
Masons	Chang	Apr.–June '26	Chang	60	Head worker
Mat Tent Builders	Chang	Dec. '26–Mch. '27	Chiang	60	Old head worker
Paper Hangers	Wang	Apr.–June '26	Wu	60	Officer
Painters	Chang	" " "	Meng	50	Head worker
Shoe Fasteners	Wang	" " "	Liu	60	Head
Silk Thread Makers	Wang	" " "	Chang	60	"
Tailors	Chang	Dec. '26–Mch. '27	Wang	55	Shop manager
Table & Chair Makers	Chang	" " " "	Chiang		Yearly secy.
Tinkers	Chang	Apr.–June' 26	Wang	70	Head
B. Commercial					
Clock Stores†	Chang	Dec. '26–Mch. '27	Chao	50	Mgr. & head
Cloth Stores	Wang	Apr.–June '26	Fang	40	Member
Coal Stores	Wang	" " "	Lu		Secretary
Confectionery Stores	Wang	" " "	Liu	50	Member
Dyestuff Stores	Wang	" " "	Chang	50	Head secy.
Fur Stores	Chang & Wang	" " "	Liu	70	Yearly secy.
Hat Stores†	Chang	Dec. '26–Mch. '27	Chu		Former yearly secy.
Leather Stores	Chang	" " " "	Sun		Shop manager
Mutton Shops	Franklin Lee.	June–July '26			
Oil Stores	Chang	Dec. '26–Mch. '27	Che		Member
Pork Shops	Franklin Lee.	June–July '26			

* Both make goods and have stores for sale of goods.

† Both have stores and skilled artisans in stores.

4: Burgess E-4, 5 (1926-1927) 1928 AF12 North China AF12

*441
*467
124

TABLE IV—*Continued*

Name of Guild	Name of investigator	Date of investigation	Name of person who gave information	Approximate age of informant	Position of informant in guild
B. Commercial—*Continued*					
Rice and Flour Stores	Wang & Lee	Apr.–June '26	Han	40	Guild secy.
Restaurants	Chang	Dec. '26–Mch. '27	Sheng		Secretary
Satin & Silk Stores	Chang	" " " "	Chin		Head
Second Hand Clothes Stores	Chang	" " " "	Liu		Old member
Shoe Stores	Chang & Wang	Apr.–June '26	Chang	60	Head
Sweet Oil Stores	Chang	Dec. '26–Mch. '27	Chang		"
Vegetable Sellers	Chang	" " " "	Ku	54	Head worker 35 years
C. Professional or Occupational					
Actors	Chang & Wang	Apr.–June '26	Han	40	Head
Barbers	Chang	Dec. '26–Mch. '27	Fan		"
Blind	Chang	" " " "	Chao		Old member
Cooks	Wang	Apr.–June '26	He	40	" "
Kitchen Coolies	Chang	Dec. '26–Mch. '27	Wang	40	Member
Porters	Chang & Wang	Apr.–June '26	Liu	50	Head
Story Tellers	Wang & Lee	" " "	Chang	40	Guild Head's son
Waiters	Chang	Dec. '26–Mch. '27	Lu	70	Head

SUMMARY

Classification	*Number*
Handcraft	16
Commercial	18
Professional or Occupational	8
	—
	42

4: Burgess E-4, 5 (1926-1927) 1928 . AF12 North China AF12

*441 offenders are brought to the master and are fined incense
*467 money." The master is considered to have control over the
782 actions of the guild members, and the breaking of the guild rules must be confessed and retribution made before him.

In several reports from commercial and craft guilds emphasis is placed on the good fellowship and friendship created by the meetings. The Hat Stores Guild says that the significance of the religious meetings can be expressed in two words, "worship and friendship." The Tea Guild of Foochow says that "the significance of the meetings lies in the creating of an atmosphere of friendliness." The reply to this question made by the Flowered Satin Merchants Guild of Nanking pictures the attitude of the guildsmen: "The religious nature is the vital element of the Association, Master *Chiang* and *Yun Chin* having become the collective symbol of the Association. On their birthdays feasts are enjoyed, business discussed, officers elected, apprentices initiated, and a feeling of friendliness among members created." [1]

It is evident, then, that in some guilds the religious ceremonies have become merely formal, but that in others, especially among the craftsmen (who usually are less literate and less in contact with present currents of life than the merchants) and the professionals, there is still a profound conviction as to the power of the guild master and his worship.

F. Evaluation of Religious Worship in the Guilds

*441 In endeavoring to evaluate the significance of religious
467 worship in guild life, we should first point out that *a priori*
124 we would expect the reports by our investigators to be biased
782 against the worship of the guildsmen. Our investigators and Mr. Chiao, the priest, were educated men. Mr. Chiao

[1] Master Chiang is supposed to have originated weaving, and Yun Chin, a woman, is supposed to have been the originator of sewing.

4: Burgess E-4, 5 (1926-1927) 1928 AF12 North China AF12

was trained in the old Confucian School and would be expected to have the prejudice of the Confucian scholar against what is customarily considered by this group to be the superstitious practices of the unlettered artisans and merchants. The three investigators were men trained in Christian colleges in China, and one of them also at Columbia University. One naturally would not expect an understanding report on the significance of these primitive religious practices from men of such background. But in spite of this background the testimony of Mr. Chang, our principal investigator, has significance. He acknowledged his previous conviction that the religious practices of the guilds were entirely formal and of no importance, but after he had studied guild after guild he was forced to admit that religious practices and beliefs were an important feature of guild life.

The decline in religious interests in many of the guilds, already noted, should not lead us to discount the original strength of the religious element in guild life. Here we can do no more than point out certain possible interpretations of the religious ceremonies.

(1) At least in the minds of certain of the craftsmen, the most important element in religious worship is genuine thanksgiving to the guild founder for having originally discovered the craft, for in so doing the founder has supplied a means of livelihood for his followers.

(2) It is possible that the religious ceremony dignifies the workmen in their own estimation of themselves. Are they not those who are in the line of succession as followers of the guild founder? They are keepers of the tradition of good workmanship, or of honesty or other virtues characterizing the master. There seems little evidence that the guilds guard as secrets the processes of their crafts. We are told, however, that certain of the dyeing processes are kept as secrets of the guild, but it has not been possible to verify this statement.

5: Tao E-5 (1926-1927) 1928 AF12 North China AF12

125 spend for their purchases. Then there is also the question of weights and measures. In Peking where standard measures have not yet been uniformly adopted, one catty at the grocer's, for instance, may mean only eight-tenths of the standard weight of the Chinese Bureau of Standards. All these facts have to be taken into consideration in the preparation of a good account-book.

124 Secondly, there are needed investigators who have the patience and perseverance to visit every day different families and have also the care and tact to record all the items of their earning and expense. In many countries where workingmen can be pursuaded to keep accounts for themselves, the business of the investigator will be simply to give them advice and check their books. In China, however, this becomes an impossibility since most of them lack even the elementary knowledge of the three R's. Generally speaking, the housekeeper in China as in other countries is a good financier as it is her chief business to spend the slender family income for the support of its members and if there is an insufficiency, also to make the two ends meet. But to keep a clear and accurate statement of all the items of household economy is quite a different thing, since this requires extra effort and special intelligence. Besides, it is too much to expect members of a Chinese working family to keep such accounts, fatigued as they always are after a day's hard work. Consequently, the investigator must take the matter into her own hand and devote all her time to keep accounts for them. Indeed, this is the only practical way of studying the family budget of the working class in this country if one's aim is to obtain accurate figures. Hence, unless and until Chinese labourers are taught to keep their own accounts, the family budget inquiry in China will necessarily be of a limited scope. At the present time, to undertake an inquiry on a very large scale would incur a heavy expense. For instance, if one investigator could take charge of thirty families—this may be considered as the maximum number an investigator could handle, presuming also that the families under investigation all live near together—to

5: Tao E-5 (1926-1927) 1928 AF12 North China AF12

keep accounts for 3,000 families would require a standing force of one hundred investigators. In view of this condition that necessarily circumscribes the Chinese family budget inquiry, it is therefore only natural that in this first attempt one should be contented with but a small number of samples. 124

Thirdly, with competent investigators and handy account-books, one has still to find households that are willing to receive the investigator day after day and tell her of the details of their earnings and expenses. If it is a universal phenomenon that every family is jealous of an outsider to pry into its conditions of living, how much more resentful would it be, if it has to receive day after day a stranger and to be pestered by all sorts of questions, often very detailed but always exacting, from "what one gets" to "on what one spends?" This is indeed something intolerable. Thus, to win the confidence of the families and to obtain from them full information of their living becomes one of the greatest obstacles in conducting a family budget inquiry.

It is, however, not without reason that the families under investigation are frequently reticent and unwilling to impart information. Apart from the bother and vexation which the daily reception of the investigator by the family necessarily involves, one of the reasons that may be attributed to this attitude is an instinctive fear of being taxed on the part of the family. Although the families under investigation generally lack tax-paying capacity and should necessarily be exempted under any system of taxation, nevertheless, there always lurks among them a strong suspicion that the inquiry is merely a prelude to some levy. For how could they account for the action of these investigators who make day by day so systematic and thorough a study of their economy? In order to dispel their suspicion, explanations regarding the nature of the inquiry must be offered to them in an entirely clear and intelligible way. Another kind of suspicion the inquiry usually arouses among them is that the investigators are taken as communists. While they might be ignorant of the implications of a full-fledged communism, nevertheless, they must have gleaned some notions about it, for in this 123

5: Tao E-5 (1926-1927) 1928 AF12 North China AF12

123 economy. At any rate, she alone could tell the minute details of her daily expenses. Fourthly, the nature of the investigation being such as requires constancy, patience and diligence, there is no doubt that the woman as a rule excels the man in these qualities.

• 124 Furthermore, it should be pointed out that the daily recording of accounts is essentially a routine work. One may perhaps take up the work with zeal and interest at the start, because it gives her a chance to meet people of a different class, to probe into their conditions of life and to discover things which she has never experienced before, but as time goes on and the work becomes routinized, her enthusiasm for it would dwindle. Simultaneously there is often found a corresponding slackening of interest on the part of the people under investigation. Cross-examined day after day with an almost invariable series of questions, they soon begin to get tired of the presence of the investigators. Like the long distance race, inquiry of this kind is often the most difficult when it comes to a later, and particularly the last stage. Thus, unless the families know how to keep their own accounts and find interest in the work, this serious limitation to the inquiry seems to be inevitable.

So far we have dwelt in particular on the problems that are involved in the family budget inquiry of the Chinese working class. For the educated and highly enlightened class, however, budgetary inquiry seems to be much less difficult, since the task of recording the daily accounts may be entirely put into their own hands, after certain instructions having been given them, and consequently both the question of selecting the investigator and the bother and difficulty that usually attend the daily visit to families will not arise so formidably as in the other case. Given a well-designed account-book and provided with detailed directions, an educated person will, as a rule, be able to fill it with accuracy and completeness. Thus, at least, the book-keeping part of the work of the inquiry is relegated to the families and what remains to those who conduct the inquiry will

5 Tao E-5 (1926-1927) 1928 AF12 North China AF12

be confined mainly to canvassing families which volunteer to keep accounts and to analysing and computing the data from the books returned.

Now in the matter of securing families which will and how to keep acoounts, one meets with a serious obstacle. With no inducement whatever, it seems almost impossible to recruit a sufficient number of families that would volunteer to record their daily accounts, except of course those which realize the value and importance of the inquiry and willingly contribute their service to it. After having secured the required number of families that promised to take up the task of book-keeping, there remains still the problem of having the work continued for a considerable length of time. Unless the keeping of the household account is developed in a person into something like a habitual act, it seems almost impossible to expect him to persist in the practice. Thus, although much less work appears to be involved in a budgetary inquiry of the educated class than in that of the working class, yet the effort put forth in securing a sufficient number of such households and in pursuading their interested members to continue with the book-keeping for a considerable time is by no means less arduous.

The present study is an analysis of 300 account-books. Of this number, 288 are the books of working families for six months in 1926-1927, while the rest are those of 12 households of elementary school teachers for the month of November, 1926. It is evident that, by far, the greater amount of useful data are contained in the former set of accounts and consequently we are enabled to devote the greater portion of this book to a study of the standard of living of the working class. The data furnished by the twelve household accounts of elementary school teachers are necessarily meagre and in many cases perhaps partial, as the study is limited to one winter month. Yet from another standpoint, meagre as the data are, they will in a measure throw much light on the living conditions of an important class, which, in China as in every other country, is poorly remunerated, in spite of their

5: Tao E-5 (1926-1927) 1928 AF12 North China AF12

124 Thus, the two investigators went their rounds to these families every day, except Sunday, for seven months and recorded their daily accounts with care and diligence. During the months that the inquiry was conducted, the investigators met the field secretary once every week, presenting their books for scrutiny and criticism and discussing with him questions that arose in the course of their work. Discrepancies that were discovered in the books were either at once corrected after thorough discussion or to be ascertained later by the investigators. In this way were the books kept under supervision continuously for seven months. According to what was arranged, the inquiry ought to have been concluded in March, 1927 but it was found necessary to prolong one more month as some accounts taken in October 1926, were incomplete and had to be rejected. Altogether 362 books were returned, but excluding those which were either incomplete or inadequate for our purpose either on account of the composition of the family or the nature of the income, only the accounts of forty-eight families, aggregating 288 books in all, were selected for analysis and computation.

During the period of the inquiry, a gift of 100-150 coppers was made to each family every month as compensation for the trouble its members had to take every day. Now as the gift for the six months amounted only to $2.00 to each family, its effect on the families would, therefore, hardly be so much as to change their standard of living. Apart from the gift in money, toys were also presented to the children on festival and new year days, their value being, as a rule, only ten or twenty cents.

565 735 While the social aspects of the working families under investigation will be treated in a later chapter, it would be of interest at this juncture to consider their status and see what social or economic class in Peking they may claim to represent. According to an estimate made by the Peking Police Department in December, 1926, the families of the Metropolis were classified under five economic groups and distributed in the following manner.

7: Gamble S-5 (1926-1927) 1933 AF12 North China AF12

511 complete written family accounts kept for six months or a year. Many well-to-do households keep such accounts, especially if several branches of the family are living together and contributing to a common treasury. All the contributors are interested in seeing that the money is properly handled, so the family treasurer is required to keep complete and detailed records. Some of these accounts have been secured and studied,[1] but they have not been available in any considerable number. Records of the income and expenditure of workers' families have not been available because the Chinese working classes seldom have enough education to keep accounts. Complete accounts, therefore, could be secured only if families could be found who would be willing to report their income and expenditures, day by day, for a period of several months, and if a method could be devised whereby outside help might be used to record the daily transactions for those families in which no one was able to write.

124 This is the report of such a study. Using personal contacts, beginning first with the friends of our field-workers, then working with friends of their friends, we gradually built up a group of Chinese families living in Peiping who were willing to tell what money they received and how they spent it. The first of these families were secured in June, 1926, and they began keeping accounts on July first. Others were added as they could be persuaded to join the group. Our first goal was 100 families, most of them belonging to the artisan or unskilled groups, and having incomes of $30 a month or less. We wished to include some families with larger incomes also, in order

[1] No. 16, Bibliography. (All numbers in the footnotes refer to the titles in the Bibliography given in Appendix III.)

7: Gamble S-5 (1926-1927) 1933 AF12 North China AF12

that their budgets might be compared with those of the poorer families to show how family expenditure is affected by difference in income.

An unexpected response from the Chinese families made it possible to enlarge the study until, on December first, the lists included 313 families. Each of the two head field-workers secured and supervised virtually one-half of the families included in the study. The problem of keeping the accounts was solved by having writers call every day, or every other day, on those who could not read and write. These writers recorded the daily receipts and expenses of the household. Some 60 families wrote their own accounts under the supervision of the head field-workers.

The months from July through November, while the list of families was being built up, were used as a time of experiment to bring out difficulties, to train workers, correct forms and revise methods of work. On December first the lists were considered complete, and no new families were added after that time. The study was continued for a full year, ending November 30, 1927. Some of the families grew tired of giving a daily report to the writers and withdrew before the year was finished, some moved away from Peiping, some households were broken by death, some accounts were incomplete and others were evidently inaccurate. Omitting all these, accounts sufficiently complete for use were secured from 283 families. The incomes ranged from $8 to $550 a month, silver.[2] One hundred and thirty-five families, 48 per cent of those included in the study, had incomes of less than $30 a

[2] Amounts are given in Chinese silver dollars. Average gold-silver exchange rate for 1927: $2.24 silver = $1.00 gold; 1931 average: $4.54 silver = $1.00 gold.

7: Gamble S-5 (1926-1927) 1933 AF12 North China AF12

month; 110 families, 39 per cent of those studied, received between $30 and $100 a month; and 38 families, 13 per cent, had incomes of $100 or more a month.

In order to determine how increased income influenced family expenditure, the families were divided into 19 income groups. Below $40 a month, the range for each group was $5 a month—from $5 to $9.99, from $10 to $14.99. Between $40 and $100, the range was $10 a month; and between $100 and $200, it was $25 a month. The families with incomes between $200 and $300 a month were grouped together, and those receiving over $300 a month. The small-range income groups have been used for the low-income families in order to show the change in expenditure which is the result of a few dollars difference in income, and to allow for the large proportional change made by that difference. An extra $5 a month means an increase of 50 per cent for a family ordinarily receiving $10 a month, and a 15 per cent increase for a family receiving $35 a month. Larger range groups have been both necessary and advisable for the higher income families. Between $10 and $60 a month, the income groups had from 16 to 60 families each. The other groups were smaller, with 3 to 12 families in each. The number in each group is given in Table 2. It is recognized that 19 income groups is a large number, and that in some groups there are only a few families; but, because of the general distribution of the families and the results secured, it has seemed better not to reduce the number of groups.

As the families included in our study lived in different parts of the city, represented a wide variety of occupations, and, so far as we could determine, were a reason-

7: Gamble S-5 (1926-1927) 1933 AF12 North China AF12

ably average sample, the number in the different income groups seems to be sufficiently large to give a complete picture of the average expenditure of the families in the lower income groups; and, in the higher income groups, to provide sufficient data to show clearly how a change in family income affects the size of the family and the distribution of its expenditure.

In return for the keeping of their accounts, the families with small incomes were paid a dollar a month. Where the income was larger, presents given at Chinese New Year and the Spring and Autumn Festivals, the fifth of the Fifth Moon and the fifteenth of the Eighth Moon, seemed a better way of recognizing the help which had been given. A basket of fruit, cakes and tea was the usual gift, some of these costing $2 and others $3, the more expensive being given to the families with the larger incomes. The dollar a month given to the poorer families was entered on the family accounts since it was part of their money income, but the presents of fruit, tea and cake were not included. These gifts may have reduced slightly the household expenditure; but, for the most part, they were not the type of food the families would buy if they were to choose how the money should be spent. A few families reported some other small gifts of food, but no attempt was made to estimate the value of these gifts, and they too were omitted from the accounts.

An account-book of some twenty pages, similar to the one shown in Figure 1, was given to each family every month. These provided space for recording the daily receipts from different sources, and the daily expenditure for each of the many items bought by the family.

7: Gamble S-5 (1926-1927) 1933 AF12 North China AF1

II

SOCIAL DATA

Distribution in the City

In securing the families for this study, an effort was made to represent all parts of the city of Peiping. In the group finally selected, there were 151 families living in the North City, 102 in the South City, and 30 outside the city walls. Some families were studied in all but two of the 20 police districts inside the city walls, and outside of five of the thirteen city gates. The two missing districts were Central No. 2, the west half of the Imperial City, and Outside Right No. 2, part of the business district outside Ch'ienmen. The problem of transportation, and the fact that most of the families had to be visited at least every other day, made it necessary to have most of them in several main centers. The largest numbers were 57 families in one center, and 25 in another, in police district Inside Left No. 1, the southeast corner of the North City; 63 families in Outside Left No. 5, just north of the Temple of Heaven; 26 in Inside Right No. 1, south of the west side of the Imperial City and near the electric light plant; 15 in Inside Right No. 3 near the Drum Tower and the Presbyterian Mission; and 15 outside of Chang I Men, the gate in the middle of the west wall of the South City. There were from two to eight families in the other police districts. (Figure 3.) The Inside

7: Gamble S-5 (1926-1927) 1933 AF12 North China AF12

124 districts are in the North, or Tartar City. The Outside districts are now inside the city walls, but are still called "outside," because they are in the South, or Chinese City, which was established in 1524 but was not walled until 1564. The walls of the North City were given their

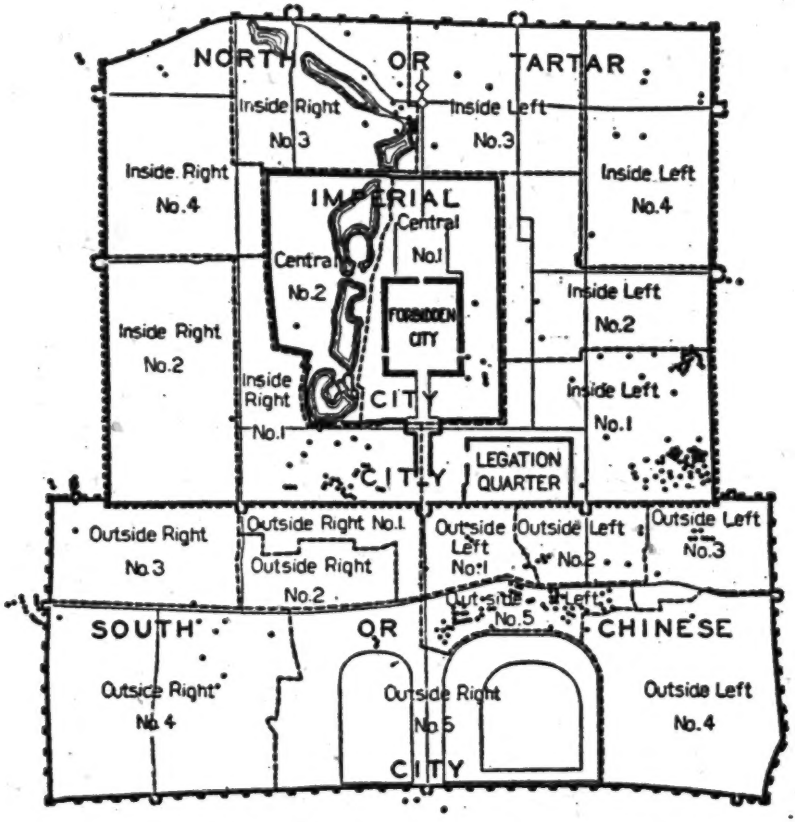

FIGURE 3—Distribution in Peiping of the Families Studied.

present form and faced with brick in 1435.[1] "Left" is east and "right" is west, the directions as seen by a man facing south, the cardinal point of the Chinese compass.

The range of income of the families in the different

[1] No. 17.

7: Gamble S-5 (1926-1927) 1933 AF12 North China AF12

The range of income of the families in the different districts shows that the poor and the well-to-do families tend to live relatively near each other. The 38 families with incomes of more than $100 a month were living in 11 different police districts and outside two of the gates. So far as can be determined, the only differences in the accounts that were the direct result of the location of the homes, were lower rents for those living outside the city wall, and no expenditure for water by many of the families outside the gates, since they were able to carry their own water supply from the public well, and were not obliged to buy it from a water-carrier.

Race and Origin

There were 256 Chinese, 23 Manchu and four Mohammedan families in the group. It is estimated that the population of the city as a whole is from 72 to 77 per cent Chinese, from 20 to 25 per cent Manchu, and 3 per cent Mohammedan,[2] so there is a relatively small representation of Manchu and Mohammedan families in our group. However, aside from the fact that the Mohammedan families do not eat pork and do not use coffins when burying their dead, the accounts have not shown that race has any noticeable influence on the economic life of these families.

The heads of 60 per cent of the families were born in Peiping; 25 per cent came from Hopei (Chihli), the province in which Peiping is located; another 10 per cent from Shantung. Only 13 families, 5 per cent, came from provinces other than Shantung and Hopei. These came from nine different provinces, as far south as Kwantung,

[2] No. 17.

8: Lin E-5 (1927)1928 AF12 North China AF12

acknowledged that had it not been for the help of the administrative staff and the assistance of some of the enthusiastic and intelligent workers in the factory in explaining these terms to the majority of the factory hands, our investigation could not have been conducted as satisfactorily as it was. 123

Difficulties of Interview.—Another difficulty was encountered in the course of interviewing the workers. The interview could be done only during leisure hours of the workers, but such chances were often found rare. Night workers had to rest during the day, while day workers had to remain on duty. Even those who were off duty were not infrequently absent from their rooms, for they might be out. The investigator was so often disappointed to find none of them in the dormitory, although, at other times, he might come across a big group sitting and chatting in the dormitory room, all of whom, however, had already heen interviewed! To overcome these difficulties, personal interviews with night workers were arranged in the afternoon just before they resumed work, while interviews with day workers were usually carried on in the evenings. As there were changes of shifts every week in the factory work, it was found possible to secure information from both day and night workers when arrangements were made beforehand. 124

As has been noted, the workers were often found unable to understand the purpose of the investigation, much less to appreciate it. Before the investigator could obtain answers from them, it was necessary, therefore, to work up their interest in the subject by means of casual conversation. As soon as they showed some indication that they seemed to understand the purpose of our investigation, then questioning began. The investigation was generally conducted in such a way as to make the interviews extremely informal, appearing more like chatting than anything else.

The investigation of the families of the non-resident workers was even more difficult than that of resident workers. Whereas the latter all lived in the dormitory and could be easily located, the houses of the former were, however, all scattered about. In

8: Lin E-5 (1927)1928 AF12 North China AF12

fact, their houses were not even numbered and the rooms were invariably so small that the investigator could not possibly go in, while female inmates were there. Frequently their relatives or friends were asked to serve as guides, taking the investigator to the various houses. The time available for the investigation was rather limited, as the workers being mostly of the skilled class were generally only free at their respective homes from seven to ten o'clock in the evening. Needless to say, our purpose of making this investigation that was repeatedly explained to the resident workers had to be reiterated to the non-resident workers. It was a trying task to the investigator to have to listen patiently to the endless tales of the miserable families on the one hand and to be economical in time on the other, for any sign of impatience which he might show on his part would be interpreted to imply insincerity and lack of sympathy. Thus, the amount of time consumed in the investigation of one family was about one hour and a half which was often sufficient for investigating three resident workers. It may be argued that the time thus consumed might be spared, if the investigator could just call in those workers and question them instead of visiting them at their homes. But then it would deprive him of the opportunity to gain first-hand impressions on the living conditions of the workers at home. A careful examination of the home environment often disclosed to the investigator certain points which the worker either failed to report or failed to report accurately.

Irregularity of the Work.—With the exception of seventy-five who were skilled, all the other workers in the factory were constantly subject to change of employment, and, as a consequence, their cost of living must have changed also. Worker A, let us say, was engaged in salt manufacturing in March, and his expenses for food and clothing were rather high, as his income was increased to the amount of $4 or $5 a month. In June, however, he might be transferred to do the job of a watchman with a reduction of his wage and all his expenses had to be reduced accordingly. In November, he might again be called upon to pull coal cart. His expenses for shoes and socks might

8: Lin E-5 (1927)1928 AF12 North China AF12

CHAPTER IV

CHIU TA RESIDENT WORKERS

I. GENERAL CONDITIONS OF THE 86 RESIDENT WORKERS

• 124 There were at the time of investigation 420 workers residing at the factory dormitory. Of this number, 86 or one-fifth had been investigated. It appears that not all of the 420 workers were eligible for investigation. Thus, there were 107 in the group of workers earning between $8.25 and $13.25 whose employment at the factory was shorter than twelve months and there were eight apprentices whose earnings were less than $8.25 a month. If we exclude workers under these two categories, the number of investigated workers is then above one-fourth. The table of the total number of resident workers and the number of workers investigated is as follows:—

Table 13.—Total Number of Resident Workers and Number of Workers Investigated, by Wage Groups

Wage group	Total number of workers	Workers investigated	
		Number	Per cent
Under $8.25	8[1]	—	—
$8.25 and under $13.25	394[2]	79	20.1
$13.25 and under $18.25	16	6	37.5
$18.25 and under $23.25	2	1	50.0
Total	420	86	20.5

[1] Apprentices
[2] Of this number, 107 worked at the factory for less than twelve months.

According to Table 14, Chihli preceded Shantung in having the largest representation among the Chiu Ta workers. This is at variance with our statement made in Chapter II, that Shantung workers formed the largest majority in the factory. The reason

8: Lin E-5 (1927)1928 AF12 North China AF12

is that new workers, most of whom came from Shantung, have been excluded in our sample.

Table 14.—Nativity of the 86 Resident Workers

Province	Number of workers	Per cent
Chihli	46	53
Shantung	31	36
Metropolitan District	7	9
Honan	1	1
Shansi	1	1
Total	86	100

As to the age of these workers,[1] it is shown in Table 15 that 67.5 per cent is between the 19-29 age interval, 25.3 per cent between the 30-39 age interval and 7.2 per cent between the 40-59 age interval. It appears that young men between 19-39 constitute more than 92 per cent of the total. The average age is 28.15. If we take into consideration all resident workers, both new and old, the average age would be still lower, as the newly recruited workers were all around the age of 20.

Table 15.—Age Distribution of the 86 Resident Workers

Age group	Number of workers	Per cent
Under 20	1[1]	1.2
20-29	57	66.3
30-39	22	25.3
40-49	3	3.6
50-59	3	3.6
Total	86	100.0

[1] The age of this worker was 19.

As has been mentioned in a previous chapter, the work in the factory may be divided into (1) the principal work, that is, salt refining work proper and (2) the subsidiary work. Except the skilled workers, such as electricians, carpenters and iron

[1] [A SAMPLE OF WORKERS IN THE CHIU TA SALT REFINERY IN TANGKU — ANALYST]

8: Lin E-5 (1927)1928 AF12 North China AF12

CHAPTER V

FAMILIES OF CHIU TA WORKERS

I. GENERAL CONDITIONS OF THE 61 WORKING FAMILIES

124 Of the 136 Chiu Ta workers who had families with them in Tangku, 80 were investigated. From this number, nineteen families had to be excluded at the time of analysis, as it was found that ten of them had stayed in Tangku for less than a year and were thus unable to supply cost-of-living figures for a period of twelve months, while the remaining nine relied for their living upon sources of income other than wages from Chiu Ta. Thus, only data of 61 workers' families will be considered in this chapter.

Table 25.—Total Number of Working Families and Number of Families Investigated, by Wage Groups

Wage group	Total number of families	Families investigated	
		Number	Per cent
Under $8.25	11	—	—
$8.25 and under $13.25	91	38	41.7
$13.25 and under $18.25	23	17	73.9
$18.25 and under $23.25	7	4	57.1
$23.25 and under $28.25	3	1	33.0
$28.25 and under $33.25	1	1	100.0
Total	136	61	44.8

It will be seen from Table 25 that workers earning less than $8.25 a month were not represented in our sample; only 41.7 per cent of those earning from $8.25 to $13.00 a month were investigated, while workers earning $13.25 or above a month were investigated in the proportion of 2:1 or even more. There is no doubt that in our sample, there was a bias for the families receiving high incomes. This could not be helped, as workers on the low

8: Lin E-5 (1927)1928 AF12 North China AF12

wage levels either had no families at Tangku or had them for a period shorter than a year. On the whole the sample may be considered as representative of that class of families in which Chiu Ta workers were main supporters. Besides, if we exclude the new arrivals in 1927, there were in the winter of the preceding year only 90 workers with families in Tangku, of which the 61 familes consituted already two-thirds. If we exclude again the eleven apprentices from consideration, there would remain only 79 families, of which our sample of 61 would constitute three-quarters.

In the analysis of the data, those who did not eat or live at home, or have any share in the family expenses were excluded from our consideration. Sums of money sent by such persons to their homes were considered as "contributions".

Of the 61 working families, 23 migrated from Shantung, 20 from Chihli, 5 from the Metropolitan District, and one from Honan. The remaining 12 were all local families, and of these nine were originally from Shantung or Chihli and established their households there after they had joined the factory.

Thirty two out of the 61 workers, it is found, had been in the employ of the factory from five to eight years, but more than one third of their families were moved to Tangku only for a year or two.

Table 26.—Age Distribution of Workers

Age group	Number of workers	Per cent
Under 20	2	3.3
20-29	18	29.5
30-39	24	39.3
40-49	15	24.6
50-59	—	—
60-69	2	3.3
Total	61	100.0

The age distribution of the workers having families is shown in Table 26. It will be noted that 67 per cent is over 29 and

8: Lin E-5 (1927)1928 AF12 North China AF12

with a view to getting some extra pay.

In our investigation, workers of a temporary nature or under a contract were excluded. The total number of regular workers of the Pacific Alkali Works at the time of our investigation, was 511, of which six were foremen. They are considered superior to ordinary workers and are often as highly paid as members of the administrative staff. Their monthly wages in the various kinds of work were: iron work, $75.75 (silver.); electrical work, $52.75; casting, $42.75; moulding, $38.75; riveting, $36.75 and carpentry, $24.75. Thus, they were also excluded in our study and there remained 505 workers in the other five classes. Table 41 shows the distribution and percentage of these workers.

Table 41.—Number of Workers in the Factory, by Classes

Class	Number of workers	Per cent
Mechanics	87	17
Firemen	15	3
Assistants	22	5
Apprentices	32	6
Common workers	349	70
Total	505	100

Most of the 505 workers came from Chihli and Shantung. On account of the fact that a great majority of the skilled workers were from Tientsin and Tangku, the number of workers from Chihli far exceeded those from Shantung. This is shown in Table 42 on the next page.

All affairs concerning workers are in the hands of the administrative department and, based upon reports from engineers and supervisers, a record of merit or demerit is kept of each worker. For the purpose of promoting working efficiency, the department has enforced rules governing rewards and fines. Rewards are of three kinds: (1) medal, (2) money prize and (3) wage increase. The money prize varies from one dollar to 30 dollars. Punishments also take three forms: (1) dismissal,

8: Lin E-5 (1927)1928 AF12 North China AF12

total disablement, the total amount of compensation as stated in Table 45 is given. (2) For partial disablement which renders the worker unable to pursue any more his original occupation, 70 per cent of the compensation is given. (3) Where disablement renders the worker defective but does not interfere with the pursuit of his original work, 50 per cent of the compensation is given.

The Family Remittance.—The family remittance system in this factory is the same as that in Chiu Ta. Given the address and the name of the recipient, the factory will send the money to the home of the worker without charge. There were about thirty workers remitting money home through the factory every month and the total amount of remittances was about $1,000 a year.

III. A SAMPLE STUDY OF 50 PACIFIC RESIDENT WORKERS.

Out of 505 workers in the Works, 53, that is a little less than one-tenth, were investigated. Three apprentices were excluded from this number, because their standard of living was different from that of the other workers. We are thus left for our study only data for 50 workers. The data of the cost of living refer to the yearly period, July 1926 to June, 1927, a period of normal conditions and comparative tranquillity. It is shown in Table 46 that assistants, being 31.8 per cent of the total of that class, are better represented than any other class of workers. Firemen

Table 46.—Total Number of Workers and Number of Workers Investigated, by Classes

Class of workers	Total number of workers	Workers investigated	
		Numbers	Per cent
Machanics	87	10	11.3
Firemen	15	4	26.6
Assistants	22	7	31.8
Common workers	349	29	8.3
Apprentices	32	—	—
Total	505	50	9.9

8: Lin E-5 (1927)1928 AF12 North China AF12

124 represent 26.6 per cent of the total of that class, mechanics 11.3 per cent, and common workers 8.3 per cent.

162 Regarding the nativity of the 50 workers under investigation, most of the mechanics and assistants were from Chihli and most of the firemen and common labourers from Shantung. This reflects in general the nativity distribution of the total number of workers.

The age of the 50 workers was comparatively young, for 23 of them were below the age of 25, 18 between the ages of 26 and 35, and 9 between the ages of 36 and 40. No worker was older than 40.

463 Table 47 shows the kinds of work and working hours of the 50 workers. Mechanics, firemen and assistants generally have fixed work, while common labourers often change their jobs in the factory.

Table 47.—Kinds of Work and Working Hours of 50 Resident Workers

466
463

Class of workers		Working hours	Number of workers
	Mechanics	8	10
	Firemen	8	4
	Assistants	8	7
Common workers	Soda worker	8	13
	Cleaner	8	5
	Repairing	8	3
	Store keeper	8	2
	Sundry job worker	8	1
	Coal-carrier	8	1
	Tea-room attendant	12	1
	Watchman	12	3
	Dustman	indefinite	1
	Total	.....	50

463 The various kinds of occupation which these workers had pursued before they joined the factory were as follows: farmers 22, artisans and workers 12, coolies 5, merchants 7 and students 4. Mechanics, being skilled workers, are recruited largely from

8: Lin E-5 (1927)1928 AF12 North China AF12

CHAPTER VII

CONCLUSION.

124 The present inquiry covers a period of three months, from May to July, 1927. Facts regarding the general features and welfare work of the factories under investigation were chiefly derived from factory records and personal interviews, while the study of cost of living was entirely based upon the schedules of 197 workers, of which 86 were Chiu Ta resident workers, 61, Chiu Ta non-resident workers, and 50, Pacific resident workers. The workers were selected at random; the proportions between the total number of workers and number of workers investigated were 4:1 for Chiu Ta resident workers, 2:1 for families of Chiu Ta workers, and 10:1 for Pacific workers.

463 At the very beginning of the investigation, there were 556 workers in the Chiu Ta Factory, of whom 75 were skilled. The unskilled labourers were mostly employed in the work of salt refining which requires neither knowledge nor experience of a technical nature; the skilled labourers were engaged in subsidiary work, such as tending the electric plant, manufacturing iron and wooden implements, etc. The Chiu Ta Salt Refinery required only workers of good health and physical strength, while the Pacific Alkali works needed skilled ones. Manufacturing soda by the Solvay process is entirely done by modern machinery and the workers have been graded into classes. Besides the 6 foremen in different fields of skilled work, the Works employed in May 1927, 87 mechanics, 15 firemen, 22 assistants, 32 apprentices and 349 common labourers. In spite of the large majority of common labourers, it was the mechanics, firemen and assistants who formed the backbone of the factory. This is the main difference in the aspect of labour employment between the two factories which are situated together and related in administrative policies.

000 The workers of these two factories, as shown by their nativity